

Conservation Security Program

Colorado Addendum 2008



Property Information

Property Location

Complete the following table to identify the location of your agricultural operation. An agricultural operation "means all agricultural land and other lands determined by the USDA Natural Resources Conservation Service Chief, whether contiguous or noncontiguous, under the control of the applicant and constituting a cohesive management unit, that is operated with equipment, labor, accounting system and management that is substantially separate from any other." Your farm and tract numbers are not required, but are useful to reference USDA Farm Service Agency (FSA) map designations on aerial photos. Aerial map photocopies of your property are available from your local FSA Office. Section, township, and range numbers can be located with the following resources: county soil survey book, 7.5 min. quad map, tax lot number from the courthouse, deed of land, local irrigation district, and the local conservation district. You may attach maps if desired.

Property Information

Property Location

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Cropland Inventory

Crop Rotation and Management: This worksheet will provide information regarding your crop varieties as well as the rotation they are grown in your operation. Please fill out this form if you have cropland or hayland that has a rotational sequence. Use the example below to fill out the blank form on the next page.

1. EXAMPLE: Crop Rotation and Management Worksheet

Cropland Inventory

1. Crop Rotation and Management Worksheet

Additional Comments or Observations:

Cropland Inventory

Cultivation and Field Operations:

This worksheet provides information on your present tillage practices. On pages _____ you will find a list of typical tillage operations to assist in the completion of the Typical Tillage Sequence by Crop columns. Please use this example to help you complete this section and include the time period in which the tillage took place, as shown by the example. The blank form for your use is on the next page.

2. EXAMPLE: Cultivation and Field Operations Worksheet

Additional Comments or Observations:

Cropland Inventory

2. Cultivation and Field Operations Worksheet

Additional Comments or Observations:

Cropland Inventory

Typical Field Operations:

Aerator, field surface, ground driven
Bale straw or residue
Bed shaper
Chisel, straight point
Chisel, straight point 12 in. deep
Chisel, sweep shovel
Chisel, twisted shovel
Cultipacker, roller
Cultivator, field 6-12 in. sweeps
Cultivator, field w/ spike points
Cultivator, row, high residue
Disk, offset, heavy
Disk, offset, heavy 12 in. depth
Disk, tandem heavy primary operation
Disk, tandem light finishing
Disk, tandem secondary operation
Drill or air seeder single disk openers 7-10 in. space
Drill or air seeder, hoe opener in heavy residue
Drill or air seeder, hoe/chisel openers 6-12 in. space
Drill or airseeder, double disk
Drill or airseeder, double disk opener, w/ fertilizer openers
Drill or airseeder, double disk, w/ fluted coulters
Drill or airseeder, offset double disk openers
Drill, air seeder, sweep or band opener
Drill, heavy, direct seed, double disk opener
Drill, heavy, direct seed, double disk opener w/ row cleaners
Fertilizer application anhydrous knife 12 in.
Fertilizer application deep placement heavy shank
Fertilizer application surface broadcast
Fertilizer application anhydrous knife 30 in.
Fertilizer application, strip-till 30 in.
Furrow shaper, torpedo
Graze, intensive rotational
Graze, rotational
Graze, stubble or residue
Harrow, coiled tine
Harrow, heavy

Harrow, spike tooth
Harvest, grass or legume seed, leave forage
Harvest, grass seed and remove forage
Harvest, hay, grass
Harvest, hay, legume
Harvest, small grains, corn, peas, canola, mustard
Harvest, legume seed and remove forage
Harvest, root crops, digger
Harvest, silage
Harvest, stripper header
Knife, windrow dry beans
Lister
Manure injector
Manure spreader
Mower, swather, windrower
Mulch treader
Para-plow or para-till
Planter, double disk opener
Planter, double disk opener w/fluted coulter
Planter, double disk opener, 18 in. rows
Planter, in-row subsoiler
Planter, small vegetable seed
Planter, strip till
Planter, transplanter, vegetable
Planter, transplanter, vegetable, no-till
Plow, disk
Plow, moldboard
Rodweeder
Roller, corrugated packer
Rotary hoe
Seedbed finisher
Shredder, flail or rotary
Shredder, rotary, remove residue
Sprayer, kill weeds, volunteer for reduced/no till
Sprayer, post emergence
Subsoiler
Sweep plow, 20-40 in. wide
Sweep plow wider than 40 in. w/mulch treader
Sweep plow, wider than 40 in.

Cropland Inventory

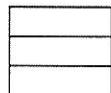
Crop Fertilizer Input

Skip this part if nutrients, including livestock waste, are not applied to your fields. If you do apply nutrients to your fields complete this worksheet to provide nutrient application information about your operation.

3. EXAMPLE: Crop Fertilizer Input Worksheet

Crop Grown	Tract No.	Field No.	Fertilizer Formulation	Application Rate (lbs./ac.)	Application Method	Application Date	Application Depth (in.)	Soil Test Date
winter wheat	19567	1,2,3	16-20-0	100	broadcast	15-May	surface	20-Oct-04
corn	19577	1	16-20-0	20	starter	15-May	2x2	"
		1	50-0-0	50	deep placement	15-May	9	"
		1	anhydrous	150	sidedress	20-Jun	12"	"
corn	19567	4	manure 23-24-41/ton	17 ton/ac.	broadcast	15-Apr	surface	"

In years nutrients applied without a new soil test, how was application rate determined?



- Previous soil test
Crop removal calculations
Crop consultant / Certified Crop Advisor recommendation

If irrigated, has water been tested for nitrates? YES NO

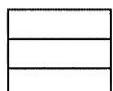
If yes, do you have copies of the analyses? YES NO

Additional Comments or Observations: _____

Cropland Inventory

3. Crop Fertilizer Input Worksheet

In years nutrients applied without a new soil test, how was application rate determined?



- Previous soil test
Crop removal calculations
Crop consultant / Certified Crop Advisor recommendation

If irrigated, has water been tested for nitrates? YES NO

If yes, do you have copies of the analyses? YES NO

Additional Comments or Observations:

Cropland Inventory

Pest Management Input

If pesticides (herbicides, insecticides, fungicides, ect.) are not used on your operation, skip this part. This worksheet includes information on the methods used to control pests and weeds on your operation. The following bullets include additional information to assist in completing this worksheet.

- Under the Suppression Method column please include the product name or active ingredient of the method used to manage the target pest listed.
- Under the Pesticide Application Rate column include the pounds or ounces of active ingredient (ai).
- Under the Weather Conditions column indicate the conditions that existed during the application of the suppression method.
 - In the Broadcast, Banded, or Spot Application column indicate if the pesticide was broadcast applied, banded, or spot applied.
 - In the Surface, Soil Incorporated, or Foliar Application column indicate if the pesticide was surface applied, soil incorporated, or foliar applied.

4. EXAMPLE: Pest Management Input Worksheet

Crop Grown	Tract Number	Field Number	Target Pest	Suppression Method	Pesticide Application Rate	Date Applied	Weather Conditions	Broadcast, Banded, or Spot Application	Surface, Soil Incorporated, or Foliar Application
winter wheat	19567	1,2	downy brome	metribuzin	0.3 lbs./ac. ai.	25-Apr	5 mph wind from S	broadcast	surface
alfalfa	19577	1	clover leaf weevil	malathion	1.0 lbs./ac. ai.	as needed	calm and sunny	broadcast	foliar
potatoes	19578	1	wireworm	phorate	3.02 lbs./1000 ft. of row	at planting	sunny, light breeze	banded	soil incorporate

Additional Comments or Observations: _____

Cropland Inventory

4. Pest Management Input Worksheet

Additional Comments or Observations:

Range and Pasture Land Inventory

The next two worksheets will break down your herd inventory needs (demands) and corresponding forage and roughage inventory available (supply). This will help you and your conservation planner determine if your grazing system is balanced for the most sustainable use of your grazing land.

Animal Unit Equivalents - EXAMPLES	
Type of Livestock	Animal Units
Beef cow, yearlong average	1.20
Beef cow, dry	0.90
Beef cow, lactating	1.20
Bull, mature	1.25
Calf, weaned	0.50
Replacement heifers	0.85
Horse	1.25
Ewe	0.20
Ram	0.25
Lamb, 1 year old	0.15
Goat	0.20

Most commercial cows average about 1200 pounds in body weight and are considered as 1.2 Animal Unit equivalents (AU). Where cow weight averages are higher, AU may be increased accordingly, such as 1.1 AU for a 1100 pound cow, 1.3 AU for a 1300 pound cow, etc. *The shown AUs are an example for general use in Colorado.*

1. EXAMPLE: Livestock Inventory, Total AUMs Needed Worksheet

Livestock Type / Herd	Number of Animals (2)	Animal Unit Equivalent (3)	Total Animal Units (4) col 2 x col 3	Months on Unit (5)	Total AUM's Needed (6) col 4 X col 5
Beef cow, yearlong average	300	1.20	360	12.0	4320
Bull, mature	15	1.25	19	12.0	225
Calf, weaned	275	0.50	138	9.0	1238
TOTALS	590		516		5783

Additional Comments or Observations: _____

Range and Pasture Land Inventory

1. Livestock Inventory, Total AUMs Needed Worksheet

Livestock Type	Number of Animals (2)	Animal Unit Equivalent (3)	Total Animal Units (4) col 2 x col 3	Months on Unit (5)	Total AUM's Needed (6) col 4 X col 5
TOTALS	0		0		0

Additional Comments or Observations: _____

Range and Pasture Land Inventory

Forage Inventory

The following worksheet will determine the total amount of forage on your operation. Utilizing this and the livestock inventory will allow you to document a balanced grazing program.

Estimate the average annual forage production per acre from your pasture or range. If you have questions please contact your local NRCS Conservation Planner. This information is critical in order to complete the rest of the Range and Pasture Land Worksheets.

In order to calculate total AUMs in your field (column 6) you will need to take the Total Acres (column 2) times Production or Yield / Acre (column 4) to = Column 5. Column 5 is then divided by 790 to equal Total AUMs per year (column 6). **Column 8 calculations will be completed by the NRCS Office based on the "harvest efficiency" of your grazing system.**

For Example -- A deferred grazing system may have a 30% harvest efficiency.

Please refer to the example for your reference and then fill out your information on the following page.

2. EXAMPLE: Forage Inventory and Number of AUMs Available Worksheet

1	2	3	4	5	6	7	8
Field / Pasture Identifier	Acres	Type of Forage or Feed	Production or Yield / Acre	Total Production or Yield	Total AUMs Available	Grazing System	(NRCS Only) AUM Capacity
Field 11, 15, & 16	18.4	alfalfa aftermath	3000	55,200	70	flash graze	25
Tract 523	5000	rangeland	900	4,500,000	5696	12 pasture rotation	1994
Tract 2395	103	irrigated pasture	3600	370,800	469	flash graze	164
Miller Place	2000	native grass	1300	2,600,000	3291	5 pasture rotation	987
Home Place	55	irrigated grass pasture	2000	110,000	139	2 pasture switchback	35
TOTALS	7176.4				9666		3204

Additional Feeds Purchased:

Type	Amount
alfalfa hay	15 ton
grass hay	10 ton
silage	20 ton

Additional Comments or Observations: _____

Range and Pasture Land Inventory

2. Forage Inventory and Number of AUMs Available Worksheet

1	2	3	4	5	6	7	8
Field / Pasture Identifier	Acres	Type of Forage or Feed	Production or Yield / Acre	Total Production or Yield	Total AUMs Available	Grazing System	(NRCS Only) AUM Capacity
TOTALS							

Additional Feeds Purchased:

Type	Amount

Additional Comments or Observations: _____

Range and Pasture Land Inventory

Grazing Records for Range

This worksheet will combine the information you have determined and developed in the last three worksheets. The following charts are provided for your use in keeping track of your grazing records on rangeland and will help you determine the current balance of forage and animals on each field.

3. EXAMPLE: Grazing Records - Range

Year or Season of Use:								
Field Identifier	Acres	Livestock Type	Livestock Number	Animal Units	Date In	Date Out	Days Grazed	AUMs Needed (days x AUs/30.4)
Field 11, 15, & 16	18	Yearlings	30	38	1-Sep	20-Sep	19	24
Tract 523	5000	Cow/calf and bulls	230	282	15-Mar	1-Jul	108	1002
Tract 2395	103	Bulls	30	42	1-Jul	1-Oct	92	127
Miller Place	2000	Cow/calf	200	240	1-Jul	1-Oct	92	726
Home Place	55	Yearlings	30	38	15-Jul	15-Aug	31	39
TOTALS	7176							342 1918

AUMs Available (from Forage Inventory Worksheet): _____ 3204

AUM Balance (AUMs Available - Total AUMs Column): _____ 1286

Range and Pasture Land Inventory

3. Grazing Records - Range

AUMs Available (from Forage Inventory Worksheet):

AUM Balance (AUMs Available - Total AUMs Column):

Range and Pasture Land Inventory

Grazing Records for Pastureland

The following charts are provided for you use in keeping track of your grazing records on pastureland.

4. EXAMPLE: Grazing Records - Pastureland

Grazing Record - Pasture							
Pasture Name:	Jones back quarter			Acres	160		
Year or Season:	spring 2004			Forage Type	orchardgrass		
Soil Test Date:	10-Oct-03						
Fertilizer:	Date Applied	10-Mar-04					
	Formulation	46-0-0 100 lbs/ac					
Livestock Type	No. of Head	Last Irrigation	Date In	Forage Height	Date Out	Forage Height	Notes
cow pairs	350	15-Mar	1-Apr	10 in.	1-May	4 in.	about 400 AUMs harvested

Grazing Record - Pasture							
Pasture Name:				Acres			
Year or Season:				Forage Type			
Soil Test Date:							
Fertilizer:	Date Applied						
	Formulation						
Livestock Type	No. of Head	Last Irrigation	Date In	Forage Height	Date Out	Forage Height	Notes

Additional Comments or Observations: _____

Range and Pasture Land Inventory

4. Grazing Records - Pastureland

Grazing Record - Pasture							
Pasture Name:					Acres		
Year or Season:					Forage Type		
Soil Test Date:							
Fertilizer:	Date Applied						
	Formulation						
Livestock Type	No. of Head	Last Irrigation	Date In	Forage Height	Date Out	Forage Height	Notes

Grazing Record - Pasture							
Pasture Name:					Acres		
Year or Season:					Forage Type		
Soil Test Date:							
Fertilizer:	Date Applied						
	Formulation						
Livestock Type	No. of Head	Last Irrigation	Date In	Forage Height	Date Out	Forage Height	Notes

Additional Comments or Observations: _____

Range and Pasture Land Inventory

Pasture Nutrient Inputs

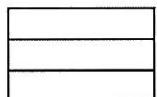
If nutrients, including livestock wastes, are not applied, you may skip this part. This worksheet contains information on the nutrient applications on your pastures. In the Soil Test column please indicate if your fertilizer application rate is based on soil test results.

Please refer to the example below for your reference and then fill out your information on the following page.

5. EXAMPLE: Pasture Nutrient Inputs

Forage Grown	Field Number or Name	Nutrient Source	Application Rate lbs/ac.	Application Method	Application Date	Application Depth	Soil Test Date
irrigated orchardgrass	Jones #1	20-0-0	400	broadcast	5/1/04 7/10/04	---	---
int. wheatgrass and alfalfa	T245 field 1	20-10-10	150	broadcast	4/14/04	---	10-Oct-03

In years nutrient applied without a new soil test, how was application rate determined?



- Previous soil test
Crop removal calculations
Crop consultant / Certified Crop Advisor recommendation

If irrigated, has water been tested? YES NO

If yes, do you have copies of the analyses? YES NO

Additional Comments or Observations: _____

Range and Pasture Land Inventory

5. Pasture Nutrient Inputs

In years nutrient applied without a new soil test, how was application rate determined?

Previous soil test
Crop removal calculations
Crop consultant / Certified Crop Advisor recommendation

If irrigated, has water been tested? YES NO

YES NO

If yes, do you have copies of the analyses? YES NO

YES NO

Additional Comments or Observations:

Range and Pasture Land Inventory

Pest Management Input

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6. EXAMPLE: Pest Management Input Worksheet

Forage Grown	Tract Number	Field Number	Target Pest	Suppression Method	Pesticide Application Rate	Date Applied	Weather Conditions	Broadcast, Banded or Spot Application	Surface, Soil Incorporated, or Foliar Application
orchard grass	19567	1,2	Canada thistle	clipping and mowing	-----	-----	-----	-----	-----
intermediate wheatgrass	19577	1	sagebrush	Tordon	1.0 lbs/ac ai	as needed	calm and sunny	broadcast	foliar

Additional Comments or Observations:

Range and Pasture Land Inventory

6. Pest Management Input Worksheet

Additional Comments or Observations: